Science Fair Project Turn In 11.Dec.2015

Must be typed and emailed as a pdf. or turned in printed out (no need to use color right now)

I. Abstract (write this last), should not be more than 200-250 words.

From Sciencebuddies.org

- **" Introduction**. This is where you describe the purpose for doing your science fair project or invention. Why should anyone care about the work you did? You have to tell them why. Did you explain something that should cause people to change the way they go about their daily business? If you made an invention or developed a new procedure how is it better, faster, or cheaper than what is already out there? **Motivate** the reader to finish the abstract and read the entire paper or display board.
- **Problem Statement**. Identify the problem you solved or the hypothesis you investigated.
- **Procedures**. What was your approach for investigating the problem? Don't go into detail about materials unless they were critical to your success. Do describe the most important variables if you have room.
- **Results**. What answer did you obtain? Be specific and use numbers to describe your results. Do not use vague terms like "most" or "some."
- **Conclusions**. State what your science fair project or invention contributes to the area you worked in. Did you meet your objectives? For an engineering project state whether you met your design criteria."

II. Introduction:

Write an introduction to your experiment that briefly explains the back ground information (what is already known about the topic). Include important background from your research that is directly applicable to your project. For example:

- Description of other previous project similar to yours,
- Describe important science concepts
- Vocabulary related to your project.

Explain who would care about the results of the experiment, and why. Use of citations (APA) is a must for the majority of the content here, especially if you have direct copies of diagrams or imaged.

III. Hypothesis and Variables:

(If…then...as measured by… statement)

Independent Variable:

Dependent Variable:

IV. Procedures and Materials

(Must be listed as steps 1, 2, 3 etc), use your final set of procedures. Be brief, concise, and to the point with each step. Talk about any changes you made to procedures during the project in the discussion area.

(Must be listed—be specific with brand names, amounts, sizes, etc.)

Material	Source

V. Graph, Data Table(s), and Date Analysis:

Use a graphing program such as Excel, Google Spread Sheets, MatLab, etc. Include title, labeled axes, data, and key. Avoid overly busy charts and graphs. Make an organized chart or a table to display your data. You must use the metric system, so convert if needed! Explain in words the trends or patterns shown in the graph, back up with data. Calculate averages if needed.

VI. Conclusion:

Should be a few **paragraphs** covering of the purpose of the experiment, a discussion of your major findings, an explanation of your findings, and recommendations for further study. Address the following points in paragraph form (don't just number off and answer each question)

i. Restate the overall goal of the experiment (include independent and dependent variables sentence.)

ii. What were the major findings? (Summarize your data and graph results)

iii. Was the hypothesis supported by the data? If so how, if not so how?

iv. How could this experiment be improved? Recall you have already made improvements between procedure version 1 and 2.

v. how could the study be carried forward -What could be studied next?

Remember to include a citation page at the end!